THE EFFECT OF PLAYING VIDEO GAMES ON STUDENT'S LEARNING AT SURABAYA GRAMMAR SCHOOL

THESIS

In Partial Fulfillment of the Requirement for Master's Degree of English Language Education

by:
RISKI RAHMADI
201610560211016

DIRECTORATE OF POSTGRADUATE PROGRAM
UNIVERSITAS MUHAMMADIYAH MALANG
July 2020

THE EFFECT OF PLAYING VIDEO GAMES ON STUDENT'S LEARNING AT SURABAYA GRAMMAR SCHOOL

Written by:

RISKI RAHMADI

201610560211016

Has been examined on

Thursday, 23 July 2020

Advisor I

Dr. Estu Widodo

Advisor II

Bayu Hendro Wicaksono, Ph.D.

Director of Directorate of Postgraduate Program

Prof. Muhamad In'am, Ph.D.

Head of Study Program

Dr. Estu Widodo

T H E S I S

Written by:

RISKI RAHMADI
201610560211016

Has been examined in front of the examiners
On Thursday/ **23 July 2020** and decided that
It has fulfilled the requirements to get
Master Degree of English Language Education
in the Postgraduate Program of Universitas Muhammadiyah Malang

The Examiners

Chief : Dr. Estu Widodo

Secretary : Bayu Hendro Wicaksono, Ph. D.

1st Examiner : Dr. Sudiran

2nd Examiner : Dr. Sri Hartiningsih

LETTER OF STATEMENT

I, the undersigned:

Name : **RISKI RAHMADI**

NIM : **201610560211016**

Study Program : **Magister Pendidikan Bahasa Inggris**

Hereby, declare that :

1. The thesis entitled : **THE EFFECT OF PLAYING VIDEO GAMES ON STUDENT'S LEARNING AT SURABAYA GRAMMAR SCHOOL** is my original work and contains no one's scientific paper that may be proposed to achieve an academic degree at any universities. Besides, there is no other's idea or citation except those which have been quoted and mentioned at the bibliography.
2. If this thesis is proven as a form of **PLAGIARISM** in this thesis, I am willing to accept the consequences including accepting the **CANCELLATION OF THE GRANTING OF MASTER DEGREE** and undergoing any procedures required by the prevailing law.
3. This thesis can be used for literature review which can be accessed by others freely **(NON EXCLUSIVE ROYALTY)**.

Thus, this statement is made truthfully to be used as appropriate.

Malang, 23 July 2020

The Writer,

RISKI RAHMADI

MOTTO AND DEDICATION

"Anyone who stops learning is old,

whether at twenty or eighty.

Anyone who keeps learning stays young."

(Henry Ford)

I dedicated this thesis to:

My Parents, brother, and friends

ACKNOWLEDGMENT

Foremost, writer would like to express my gratitude to Allah SWT, the Almighty God for without his blessing this thesis would not have been successfully done.

Besides, the writer would like to express the respect and gratitude to advisors, Dr. Estu Widodo and co-advisor Bayu Hendro Wicaksono, Ph. D. for very helpful advices, encouragement and always concern to help me perform better in completing this thesis writing.

Furthermore, precious thanks are specially appreciated to the writer's beloved parent Saifuddin and Gusti Akmalia Rahmayani, beloved brother Rangga Rahmadhani, and lovely family for their praying and support, so that the writer always be motivated to finish the study. Great thanks also go to writer's friends for the precious support during this study.

This thesis is expected to be useful for readers and might be used as reference by the next researcher to conduct similar study related to learning strategies. May Allah give his blessing to all of us and reward with the goodness and guide to the right path.

Malang, 23 July 2020

The Writer,

RISKI RAHMADI

THE EFFECT OF PLAYING VIDEO GAMES ON STUDENT'S LEARNING AT SURABAYA GRAMMAR SCHOOL

Riski Rahmadi
Master of English Language Education, Muhammadiyah University of Malang
cakiphotography2@gmail.com

ABSTRACT

The differences in learning outcomes of students who liked to play video games with students who did not like to play video games grade VI in Surabaya Grammar School.

This study aims to determine the differences in learning outcomes of students who liked to play video games with those who did not like to play video games in class VI at Surabaya Grammar School. This type of research used the Casual-Comparative research method. The study used a total sampling of three classes VI (VI-1, VI-2, VI-3) with a total of 71 students. The data in this study consisted of two, namely primary data and secondary data. The primary data used learning outcomes of all students in grades VI-1, VI-2, VI-3, while the secondary data used questionnaires. It is known that the average value of students who liked to play video games is 84. Students who did not like to play video games have an average value of 88. From the results of the analysis known by difference is 4. Based on the hypothesis test using the t-test, it was found that there were no significant differences between students who liked to play video games with students who did not like to play video games. This result is indicated by the value of t-count = -3.67 smaller than t-table = 2.00. Thus Ho received. The differences in learning outcomes of students who liked to play video games with students who did not like to play video games grade VI in Surabaya Grammar School.

Keywords: Learning Outcomes, Students who liked to play video games, Students who did not like to play video games

PENGARUH BERMAIN VIDEO GAMES TERHADAP HASIL BELAJAR DI SEKOLAH SURABAYA GRAMMAR SCHOOL

Riski Rahmadi
Magister Pendidikan Bahasa Inggris Universitas Muhammadiyah Malang
cakiphotography2@gmail.com

ABSTRAK

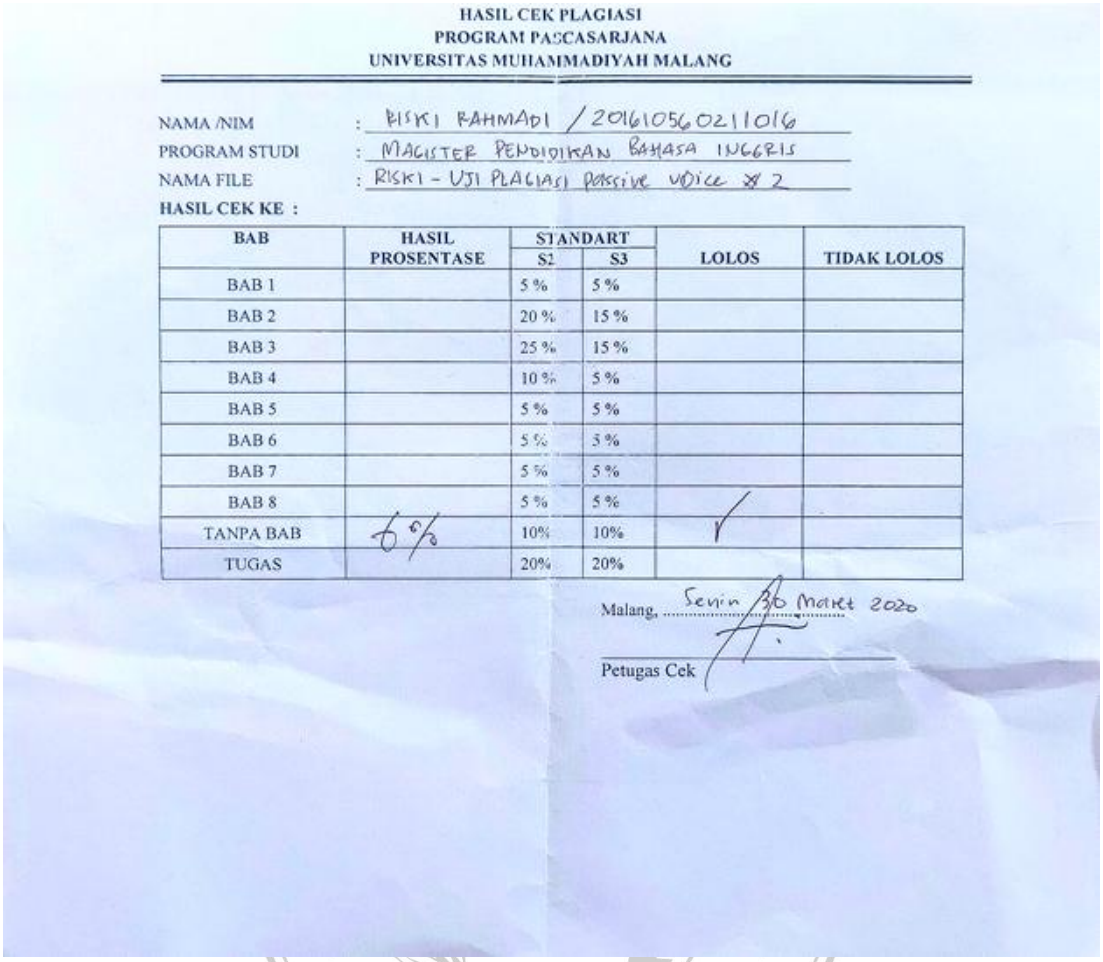
Perbedaan hasil belajar siswa yang gemar bermain video games dengan siswa yang tidak gemar bermain video games pada kelas VI SD Surabaya Grammar School.

Penelitian ini bertujuan untuk mengetahui perbedaan hasil belajar siswa yang gemar bermain video games dengan yang tidak gemar bermain video games pada kelas VI di SD Surabaya Grammar School. Jenis penelitian menggunakan Klausal Komparatif. Penelitian menggunakan total sampling yaitu tiga kelas VI (VI-1, VI-2, VI-3) dengan jumlah keseluruhan 71 siswa. Data dalam penelitian ini terdiri dari dua yaitu data primer dan data sekunder. Data primer menggunakan hasil belajar dari seluruh siswa kelas VI-1, VI-2, VI-3, sedangkan data sekunder menggunakan angket. Diketahui nilai rata-rata siswa yang gemar bermain video games 84. Siswa yang tidak gemar bermain video games memiliki nilai rata-rata sebesar 88. Dari hasil analisis diketahui dengan selisih 4. Berdasarkan uji hipotesis menggunakan uji-t diperoleh bahwa tidak terdapat perbedaan yang signifikan antara siswa yang gemar bermain video games dengan siswa yang tidak gemar bermain video games. Hasil ini ditunjukkan dengan nilai t-hitung = -3,67 lebih kecil daripada t-tabel = 2,00. Dengan demikian Ho yang diterima.

Keywords: Hasil Belajar, Siswa yang gemar bermain video games, Siswa yang tidak gemar bermain video games

TABLE OF CONTENTS

PLAGIARISM CERTIFICATE



HASIL CEK PLAGIASI
PROGRAM PASCASARJANA
UNIVERSITAS MUHAMMADIYAH MALANG

NAMA /NIM : RISKI RAHMADI / 20161056021016
PROGRAM STUDI : MAGISTER PENDIDIKAN BAHASA INGGRIS
NAMA FILE : RISKI - UJI PLAGIASI PASSIVE VOICE BAB 2

HASIL CEK KE :

BAB	HASIL PROSENTASE	STANDART S2	STANDART S3	LOLOS	TIDAK LOLOS
BAB 1		5 %	5 %		
BAB 2		20 %	15 %		
BAB 3		25 %	15 %		
BAB 4		10 %	5 %		
BAB 5		5 %	5 %		
BAB 6		5 %	5 %		
BAB 7		5 %	5 %		
BAB 8		5 %	5 %		
TANPA BAB	6 %	10%	10%	✓	
TUGAS		20%	20%		

Malang, Senin 30 Maret 2020

Petugas Cek

INTRODUCTION

Speaking plays an important role in the maintenance of language learning because it has become one of the most critical parts. In this modern era, people use language as a means of communication whether in association orally, social media, etc. Speaking on its own has no restrictions on its use. In fact, with the note that speaking has modesty in its application, for example in an informal association, we are required to use a polite language with appropriate diction. In contrast to the way the word is utilized in a friendly environment, there is almost no limit indecency. All rules are included in how to organize and use vocabulary.

Speaking requires a lot of practice to improve the speaking ability itself. Unlike other traits, speaking not only has a learner's theory of understanding, such as how many theories possess will not make the ability to speak develop without exercise. However, speaking problems can be significant challenges to active foreign language learning and communication. (Hosni, Samira Al, 2014).

Based on the quotation above, speaking requires an ability that is producing a sentence. In speaking, learners are not only expected to organize sentences, but they also need broader knowledge and understanding on how to organize and create each sentence. The importance of this speech is the use of real communication and it represents interaction with the interlocutors. The learner is also required to take cognitive abilities because, in terms of previous research and experience, it states that learners can quickly master the ability to speak with self-taught. From this learning, learners can learn how to use articulation and formulate communications quickly because they have indirectly learned how to master it through their interests. When the input is negotiated and learners produce output in interaction, they selectively take in portions of comprehensible input and choose a correct linguistic form to express themselves. This process makes it possible for learners to internalize what they have learned and experienced (Swain, 1985, as cited in Zhang, 2009).

The most difficult aspect of spoken English is that it is always accomplished via interaction with AI (Artificial Intelligence) least one other speaker, and this is

one reason why many of us were shocked and disappointed when we used our second or foreign language for the first time in real interaction. We had not been prepared for spontaneous communication and could not cope with all of its simultaneous demands (Alonso, 2012).

Accordingly, the researcher desires to emphasize those video games, which are often considered as not having a huge contribution and impact on the development of learning process, can help in the right way and make it usable. Therefore, the researcher is profoundly interested in examining the differences of students' learning result based on playing video games in English speaking learning outcomes Grade VI of Surabaya Grammar School.

Before conducting the research, the researcher asked some questions to students about video games, and the response obtained was that they were highly enthusiastic to answer questions by researcher. The researcher administered questionnaire to find out how many students like playing video games with those who do not like playing video games. It aimed to dig deeper, strengthen results, and obtain accurate data that it is true that students enjoy playing video games. After students filled the questionnaire and the data was collected for analysis. Students who like to play video games and students who did not like to play video games are described in the following results:

Table 1.1 students who liked to play video games and students who did not like to play video games on the class VI-1, VI-2, VI-3 Surabaya Grammar School.

No	Class	Total Student	Students who like to play	Students who do not like to play
1	VI-1	22	8	14
2	VI-2	24	7	17
3	VI-3	25	10	15
Total		71	25	46
Percentage			35%	65%

From the results above, the table was obtained through a questionnaire on the activities. The research results obtained in class VI which consisted of grade VI-1 in total 20 students, grade VI-2 in total 24 students, and grade VI-3 in total 25 students, and the results obtained with the percentage that 36.2% of grade VI students liked to play video games while 75.3% of grade VI students did not like to play video games. Yahya (2013) described the results of positive and negative impacts of playing video games, namely:

1. The positive impact of video games for students.
    a. Student's relationships will be more easily supervised by parents.
    b. Students' brains will be more active in thinking.
    c. Thinking reflexes from students will respond faster.
    d. Emotional students can be overflowed by playing games.
    e. Students think more creatively.
2. The negative impact of video games for students..
    a. Students will be lazy to learn and often use their free time to play video games.
    b. Students will steal time from their study schedule to play video games.
    c. Time to study and help parents after school hours will be lost due to playing games.
    d. Forgetting the time.
    e. Eating schedule will be disturbed.
    f. Emotional students will also be disturbed because of the effects of video game.
    g. The worship schedule will be neglected by students.
    h. Students tend to skip school hours for playing their favorite games.

In according with the research background, the researcher formulated the problem as follow:

1. Is there any significant difference between students who like to play video games and those who do not like to play video games in English speaking learning outcomes?

LITERATURE REVIEW

Definition of Speaking

Speaking is the ability to speak and not only knowledge of language features, but also the ability to process information and language 'on the spot' (Harmer, 2007: 284). That means that someone who interacts with others needs fast processing of ideas and delivery skills. This ability can be obtained by practicing and applying in daily activities. Speaking is also the ability to channel ideas and information orally in various situations. This kind of speech is obtained through everyday language use to become a habit called fluency.

Moreover, speaking ability is some delivery of several processes that are delivered orally when the speaker has a conversation with the other person. Speaking as the use of language quickly and naturally with the unnatural pauses, which is called as fluency (Nunan, 2006: 1). Speaking is a way of communicating that is used to express ideas to the other person. As for speaking, this is an essential thing in communication.

Speaking Performance

In addition, speaking ability denotes some delivery of several processes that are addressed orally when the speaker has a conversation with the other person. Speaking as the use of language quickly and naturally with the unnatural pauses is called as fluency (Nunan, 2006: 1). In the early age of learning, children are able to express their needs, ask questions, and learn about language they are developing. However, they have not been able to

understand and produce complex sentences and have not understood the use of language used in diverse situations. This has become the teacher's responsibility to build the foundation of language skills, especially speaking skill related to these different situations.

Recent evidence suggests when someone is able speak a language, it means that he can carry on a conversation reasonably and competently. The benchmark of the successful acquisition of language is usually the demonstration of an ability to accomplish pragmatic goals through an interactive discourse with other language speakers (Brown, 2001).

In conveying a message by someone who used language is a variety of spoken languages. Someone who delivered the message expects that the recipient of the message can understand. If the contents of the message can be known by the recipient of the message, there will be communication between the message provider and the recipient of the message. The communication will eventually lead to an understanding of the message content for the recipient. The giver of the message can also be called the speaker, and the recipient of the message is also referred to as the listener or listener or also called communication. The process of delivering messages verbally like that is called talking. Thus speaking is the skill of conveying messages through spoken language.

Types of Speaking Performance

Brown (2004: 271) described six categories of speaking skill areas. Those six categories are as follows:

1. Imitative

This point focuses on the ability to mimic the intonation of certain elements of the language. In this section, imitating phrases, words, or sentences can be the exposure to fluency. This denotes to native-like pronunciation. Also, drilling is used in the teaching and learning process so students have the opportunity to listen and say a few words verbally.

2. Intensive

In this section, students are given paired assignments (group work), by reading paragraphs, reading information from a chart, reading the dialogue with group peers, etc.

3. Responsive

Limited understanding and interaction from a short conversation in a short chat, requests, greetings, and comments. This is a kind of short answer from comments or questions initiated by students or teachers where instructions and directions have been given. Replies are usually meaningful and sufficient.

4. Transactional (dialogue)

It is carried out to convey or exchange specific information.

5. Interpersonal (dialogue)

It is carried out more to maintain social relationships than for the transmission of facts and information. The forms of interpersonal speaking performance are interview, role-play, discussions, conversations, and games.

6. Extensive (monologue)

The teacher gives students extended monologues in the form of oral reports, summaries, and storytelling, and short speeches. Based on the theory above, it can be concluded that some points should be considered in assessing speaking. The students need to know at least the pronunciation, vocabulary, and language functions that they are going to use. When the students have been ready and prepared for the activity, they can use the language appropriately.

The Relationship Between Listening and Speaking

Courses in listening and speaking skills have a prominent place in language programs around the world today. Ever-growing needs fluency in English around the world because of the role of English as the world's international language has given priority to finding more effective ways to teach English (Richards, 2008). The connection between talking and listening can be seen from the following things:

1. Speech is usually learned through listening and imitation. Therefore, the model or example that is listened to and recorded by a child is important in mastery and speaking skills.
2. Words that will be used and learned by the child are usually determined by the stimulant he encountered.
3. The child's speech reflects the use of language at home and in the community where they live. This is evident in speech, intonation, vocabulary, use of words, and sentence patterns.
4. Young children can understand the sentences that are far longer and more complicated than the sentence they say. Thus, improving listening skills means help to improve the quality of one's speech.

Video Games

Video games are playable games that use interactions with the user interface through images produced by video devices. The definition of the video game is a form of the electronic game in the form of text or images, which involves the interaction between game software, the person who plays it, and is bridged by the game processor hardware. Game software will provide output in the form of images or text displayed through the media (television, computer, cellular telephone, etc.), then the player provides input in the form of commands that are channeled through the game's hardware to be displayed again on the media. Video games is a game which we play thanks to an audiovisual apparatus and which can be based on a story (Esposito, 2005).

Video games generally provide a reward system, for example, a score calculated based on the level of success achieved in completing tasks that are in the game. The electronic systems used to run video games are called platforms, for example, personal computers and game consoles. A game is a voluntary interactive activity, which players follow rules that constrain their behavior, creating an artificial conflict that ends in a quantifiable outcome (Zimmerman, 2004). Based on the argument above, it can be specified that video games are audiovisual platforms with Artificial Intelligence (AI) systems, where the system is a digital capability that is able to learn human

abilities such as attraction, the ability to respond to human conversation, to human habits. Furthermore, AI has been applied to video games that are able to fulfill the activities of its players to carry out activities that cannot even be done in the real world with some rules from the respective games.

Types of Video Games

Video games can be divided into two categories. The first is video games according to the hardware used, or we can call them platforms. Sometimes the platform also mentions the name of the hardware provider of the video game. The second category is video games according to the gameplay, or we can call them genres (Kryzwinska, 2002). Here are some types of games based on the hardware used.

1. Arcade games

   Usually, it has a machine specifically designed for certain types of video games and has special features according to the video game genre.

2. PC Games

   Video games that are played using a PC (Personal Computer).

3. Console games

   Video games are played with certain consoles, such as Playstation, XBOX, and Nintendo Wii.

4. Handheld games

   Video games are played with special video game consoles that can be taken everywhere, for example, the Nintendo DS and Sony PSP.

5. Mobile game

   Video games that can be played or specifically made for cell phones or tablets that make it easier for players to play with their devices anywhere.

The Advantages Using Video Games in Speaking Performance

By using video games' monologue and as the attractive learning method media, the researcher expects by playing and learning English monologue in the video games, students are expected to improve their English speaking performance both directly or indirectly. Video games offer types of motivation, such as competition, diversion, enjoyment, fantasy, interest with the game, social interaction, and application (Cianfrone, 2011).

By using video games as one of the learning methods, it is hoped to help students in the learning process itself. Students experience a new learning activity by playing video games, which offer fun activities as their motivation to learn something new, especially English. There are some benefits of playing video games as a learning English method. However, the application of the ability to speak English from the habit of playing video games to be able to improve speaking skills depends on the interest of the genre of the game. Video games and cartoons engage the attention of learners, create a non-threatening atmosphere in presenting information, and have the potential to encourage the thinking process and discussion skills (Clark, 2000). Therefore, learning a foreign language while playing video games is highly suggested due to its entertainment value. Indeed, there is barely pressure or evaluation that could deter players from openly engaging in using the language.

1. Enhancing Students' Motivation through Video Games

Educational videos could be the key to keeping students motivated and attentive, but it might just depend on how they use them. The learning benefits of computer and mobile educational games. It showed that when students played video games either competitively against another student or collaboratively with their peers, they adopted a mindset that is conducive to learning. Students who played competitively performed the best, although both the competitive and collaborative groups reported higher levels of interest and enjoyment than students who had played in individual conditions. This points to the fact that educational games may not only help engage students in particular learning activities but can also increase the likelihood of re-engagement over time, whether in or out of the classroom.

2. Developing Students' Centered-Strategy in Video Gaming

A new British study found that some video games can help to train the brain to become more agile and improve strategic thinking. They published earlier this year in the same journal found that playing video games may prevent and even reverse deteriorating brain functions such as memory, reasoning, and visual processing. The University of Iowa study of hundreds of people age 50 and older found that those who played a video game were able to improve a range of cognitive skills and reverse up to seven years of age-related decline.

3. Providing Safe Learning Environment for Video Games

It is not the purpose of the game to make students feel threatened in any way by being 'put on the spot,' but rather to engage the class in a safe and supportive learning environment. Students who ideally 'want' to learn these are the intrinsically motivated students that will learn in almost any environment. They are motivated by learning for the sake of learning and are the easiest students to work with. Games can create a want to learn the environment when it is not naturally there (Race, 2007).

4. Help students with disabilities to manage their behaviors in Playing Video Games

Estimated, as many as 2.6 billion people play audiovisual games/entertainment. Numerous studies have attempted to explain in finding out the purpose of people playing video games: to relax, to have fun, to engage with friends, to challenge, and to others. However, there is one different group in this determination: people with disabilities. The results showed that many people with disabilities play video games. However, little is known about what types of video games they play, and what challenges they might

face. The reason they revealed was that they said their main reason for playing video games was to have fun and challenge themselves. Unlike gamers who have normal physical conditions, they are not attracted by competitive games. Many respondents with disabilities say they play for health reasons, combat depression, such as managing stress, and for physical therapy in their hands.

5. Making Video Games as Interesting Technology at Home

An immense motive why people are attracted to play video games so much because they are an escape from our tiresome and tedious lives. Sometimes it is such a pleasure to put on the shoes of a made-up character and overlook about all our troubles. People come home and put on a headset and play a good game because they are diving into the game's world and forget about everything around them. Another motive that they like playing video games is that people give us a sense of accomplishment**.** The feeling when you completed a good game is a feeling that is hard to compete. It makes them feel important as if we have done something right. Hence, people continue to play games that make us scream and rage quit. In brief, it can be concluded that the development of technology in video games could help people to put away the feeling of tiredness. By playing video games at home, it does not seem necessary anymore to bother and time to find a wonderful atmosphere.

RESEARCH METHOD

Research Design

Churchill & Iacobucci (2005) define research design as the blueprint that is followed to complete the study and it ensures that the study is relevant to the problem and will use the economical procedure. While conducting the

present study, care has been taken to incorporate these concepts into the research design.

The research method used in this study is a *casual-comparative* research method, which is a type of research with the characteristics of problems in z form of cause and effect between two or more variables. The purpose of this study is to investigate the possibility of a causal relationship based on observations of existing effects and look for facts that might be the cause through certain data.

The types of activities that support this research include observation or observation guidelines and documentation guidelines. The results of the research data will be obtained from the monthly examinations of students.

Participants

The participants of this study were from three classes ranging from VI-1 to VI-3 with the total number of 69 students that focused on examining English-speaking performance development from Surabaya Grammar School. They were from VI-1consisting of 20 students; VI-2 consisting of 24 students; and VI-3 consisting of 25 students. In this study, researchers used *probability sampling*. According to Sugiyono (2017: 82), "probability sampling is a sampling technique that provides equal opportunities or opportunities for each element or member of the population to be selected as a sample." Probability sampling consists of simple random sampling, stratified random sampling, stratified random sampling, cluster random sampling, and systematic sampling. In this study, the researcher used Simple Random Sampling. Simple Random Sampling is taking members of the sample from a population that is carried out randomly without regard to strata that exist in that population.

Data Collection

This section presented some steps for collecting the data in the field. It covered research data and data sources, research techniques, and instruments.

1. Research Data and Data Sources

a. Primary Data

The primary data in this study were obtained through the documentation method of the results of learning values in Surabaya Grammar School grade VI students have taken on students who liked to play video games with students who did not like to play videogames. Student learning outcomes used are monthly test results in December, in semester one, 2019/2020 school year with a total sample of 71 students.

b. Secondary Data

Secondary data is data that supports the primary data. To support primary data, the researchers used observational and questionnaire methods. In this study, researcher used an observation method that aimed to strengthen the results. Furthermore, it was later discussed the learning outcomes of students who liked to play video games and students who did not like to play video games. The questionnaire was administered to find out students who liked to play video games and who did not like to play video games because both methods were needed by researchers to reduce data errors.

2. Research Instruments

Data collection techniques are a very important step in research to get accurate and accurate data. By knowing data collection techniques, the researcher will get useful data as the main data for research. For this reason, researchers collected data below:

a. Questionnaire Guidelines

This guide is used to identify students who liked to play video games and who did not like to play video games. This guideline was carried out in the pre-research to ensure that students did indeed use their free time to play video games.

b. Observation Guidelines

This guideline is used to strengthen research by observing students who liked to play video games with those who did not like to play video games.

c. Documentation

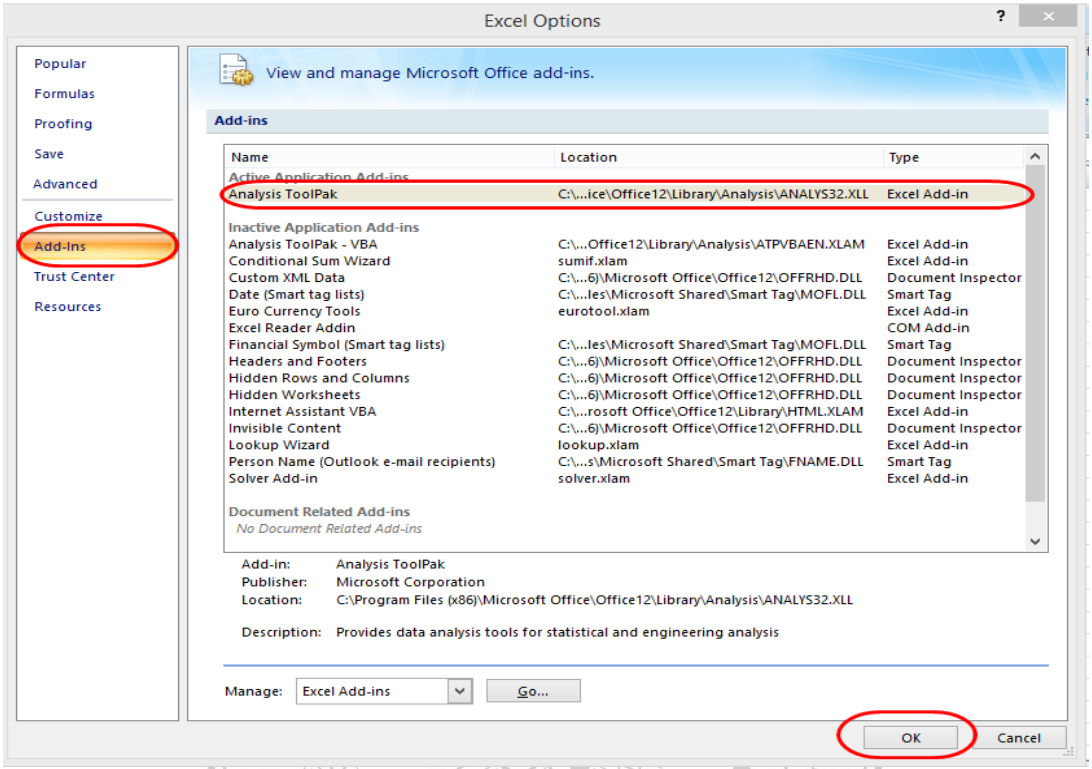
In this study, the documentation method is used to collect student monthly test data.

Data Analysis

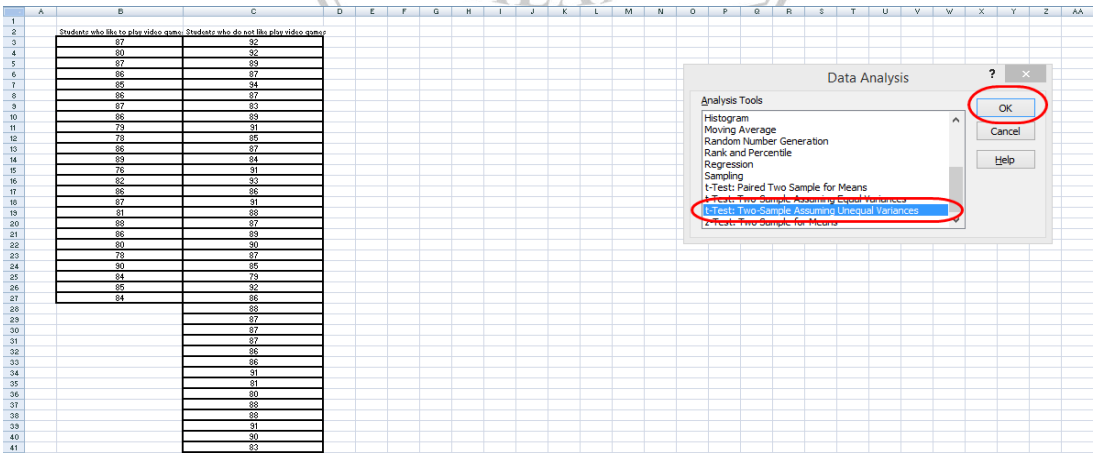
The data analysis technique used in this study is *quantitative analysis*. The data obtained will be analyzed using the two different test averages (t-test). The understanding of t-test is one of the statistics used to test the truth or falsity of a hypothesis which states that between the two mean samples taken randomly from the same population, is there a difference in variance or is there no difference in variance to determine the hypothesis result. In this research, t-test was used to find out whether there is a significant difference speaking learning outcomes or there is no a significant difference of students who liked to play video games with those who did not like to play video games. The data that have been obtained will calculate using *Microsoft Excel* to find the calculation average, variant, and hypothesis result. These calculations can be found with the formula (steps):

1. Open Microsoft Excel, input the experiment and control data

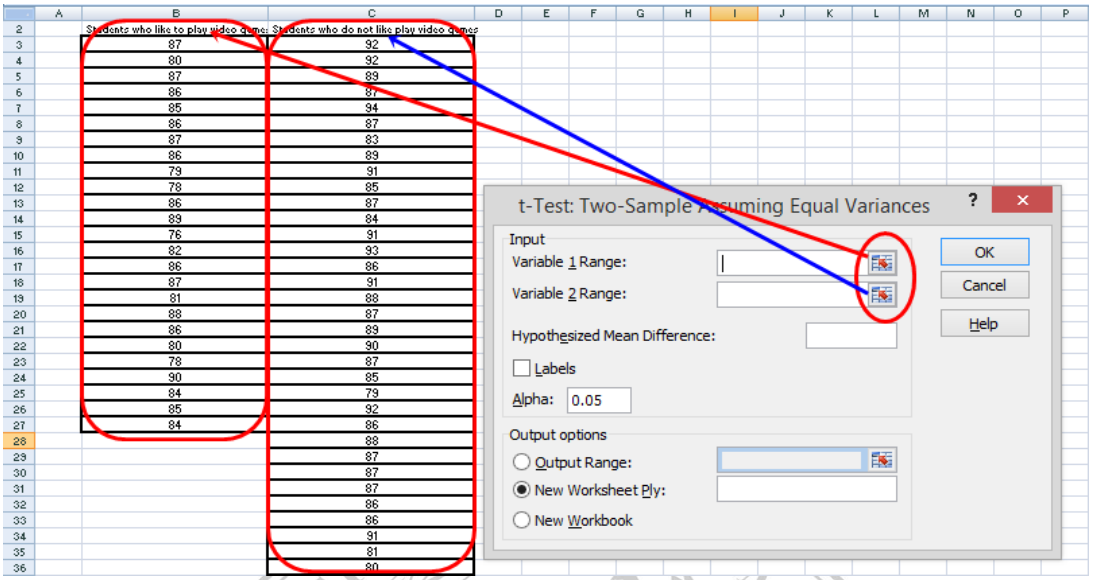
2. File, option, Adds-Ins, Manage → Go, check "Analysis ToolPak", Ok

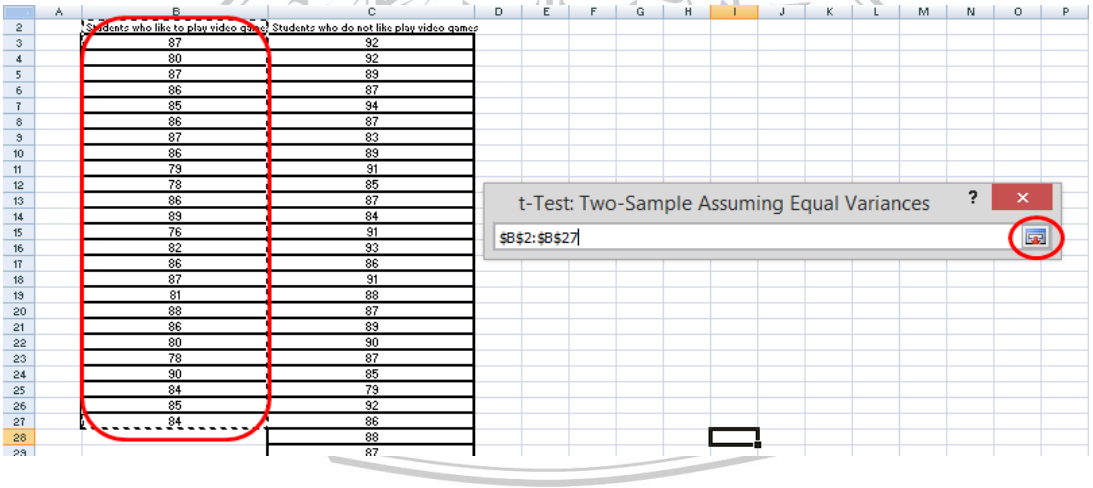


3. On the tools-bar, Data, Data-Analysis, choose "t-test: Two-Sample Assuming Unequal Variances, Ok

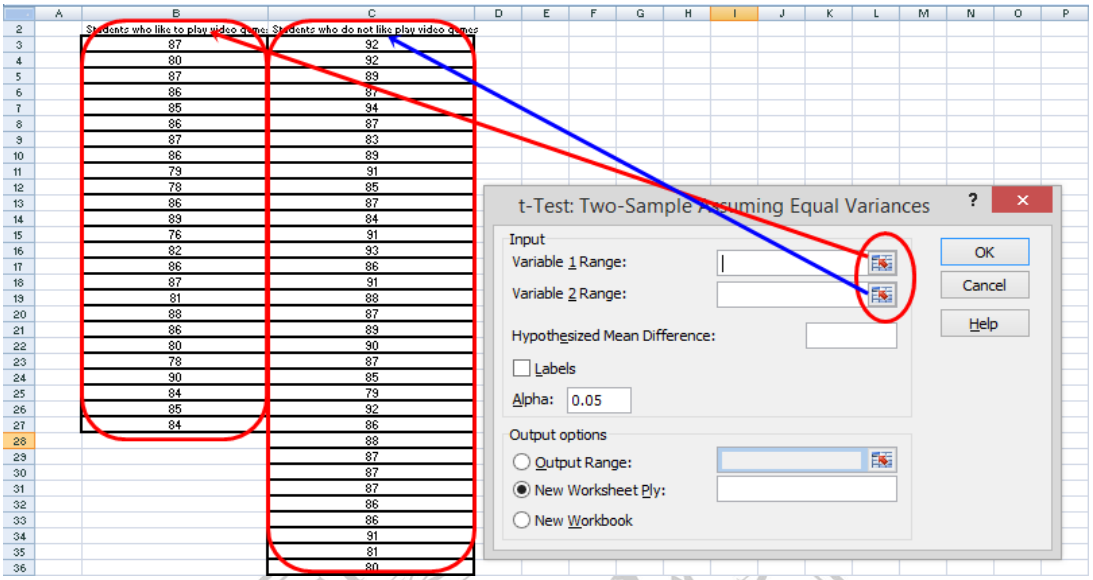


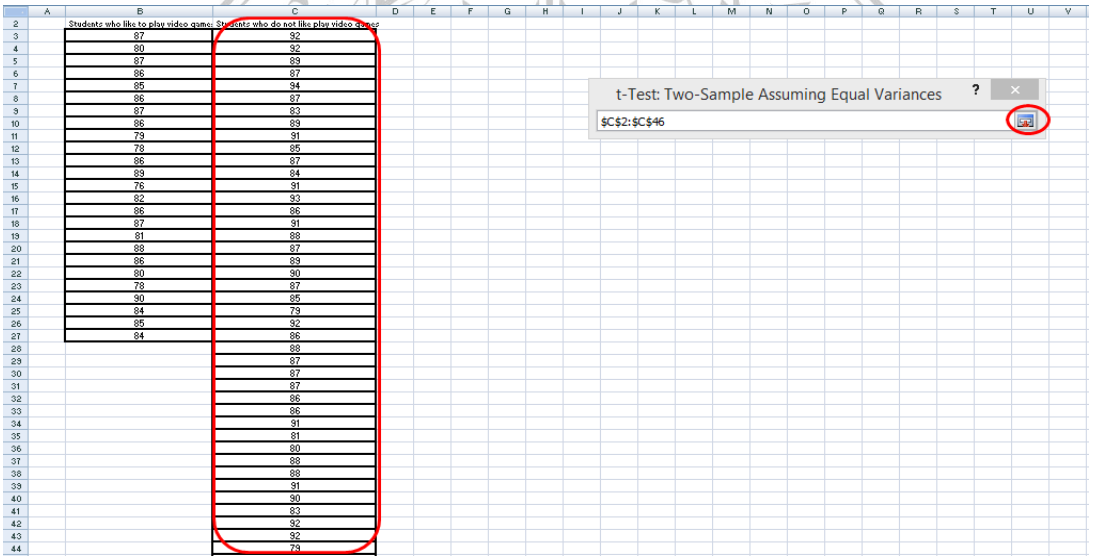
4. Click on “Variable 1 Range” input icon, drag all the contents of experiment column, click input icon



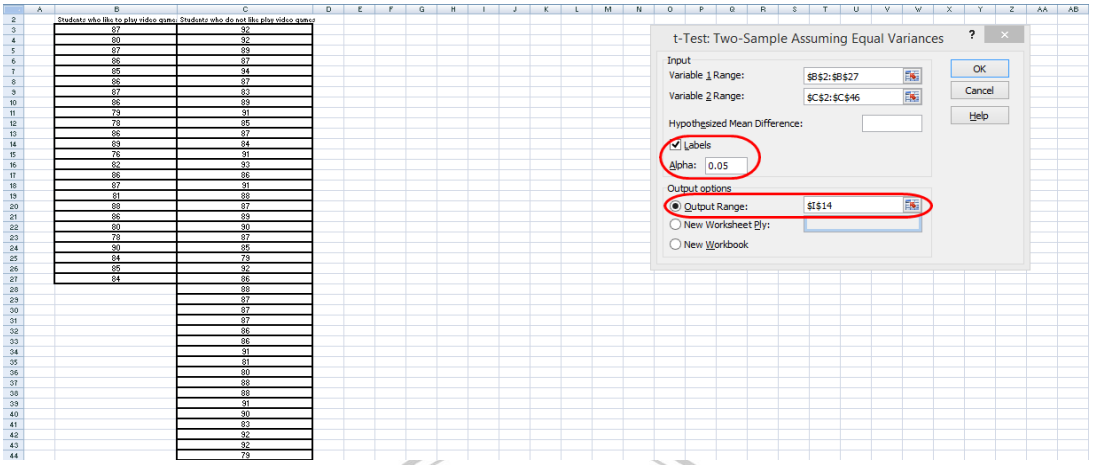


5. Click on “Variable 2 Range” input icon, drag all the contents of control column, click input icon

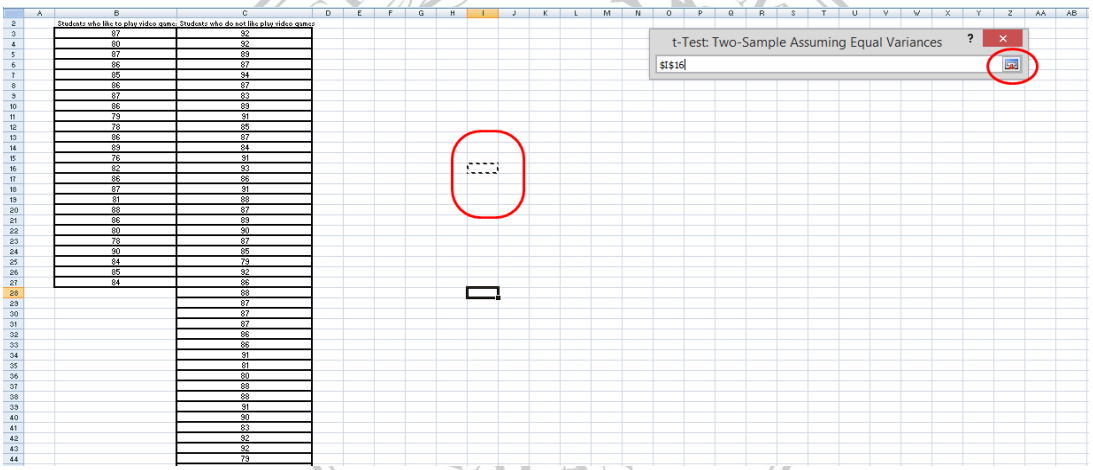




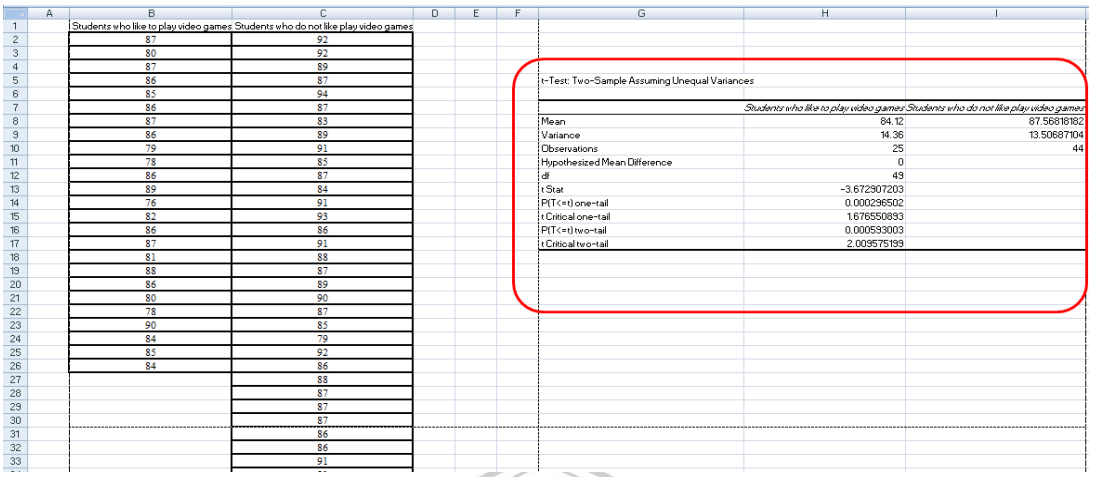
6. Check the “Labels” box, set “Alpha” into 0.05, check “Output Range” box, click “Output Range” input icon



7. Choose any empty column for set the result, click “Output Range” input icon, Ok



8. t-test: Two-Sample Assuming Unequal Variances has been set



Students who like to play video games	Students who do not like play video games
87	92
80	92
87	89
86	87
85	94
86	87
87	83
86	89
79	91
78	85
86	87
89	84
76	91
82	93
86	86
87	91
81	88
88	87
86	89
80	90
78	87
90	85
84	79
85	92
84	86
	88
	87
	87
	87
	86
	86
	91

t-Test: Two-Sample Assuming Unequal Variances

	Students who like to play video games	*Students who do not like play video games*
Mean	84.12	87.56818182
Variance	14.36	13.50687104
Observations	25	44
Hypothesized Mean Difference	0	
df	49	
t Stat	-3.672907203	
P(T<=t) one-tail	0.000296502	
t Critical one-tail	1.676550893	
P(T<=t) two-tail	0.000593003	
t Critical two-tail	2.009575199	

t-Test: Two-Sample Assuming Unequal Variances

	Students who like to play video games	*Students who do not like play video games*
Mean	84.12	87.56818182
Variance	14.36	13.50687104
Observations	25	44
Hypothesized Mean Difference	0	
df	49	
t Stat	-3.672907203	
P(T<=t) one-tail	0.000296502	
t Critical one-tail	1.676550893	
P(T<=t) two-tail	0.000593003	
t Critical two-tail	2.009575199	

Data processing and analysis in this study were conducted on the value of students' monthly tests. Data analysis was obtained from all available data from various sources, namely from the observations and observations that had been recorded.

After the data were viewed, analyzed, and studied, data reduction was carried out by making a core abstraction or summary. The next step was compiled the data in units that will be categorized while making coding. The final step of this quantitative data analysis checked the validity of the data. The data analysis technique used in this study is *Quantitative Analysis*. Quantitative research is explaining phenomena by

collecting numerical data that are analyzed using mathematically based methods (in particular statistics (Aliaga and Gunderson, 2002). The data obtained will be analyzed using the average difference test (mean), which aimed to see the differences in learning outcomes. Data processing and analysis in this study were conducted on the results of student examinations.

Statistical techniques used to analyze sample data and the results are applied to the population (Sugiyono, 2011: 209). Another definition based on Arikunto (2009: 298) stated that it served to generalize the results of research conducted on samples for the population.

Based on the results of the data analysis above, it can be concluded whether the hypotheses proposed in this study were accepted or rejected. The statistical hypotheses in this study are:

Ho : $\mu 1 = \mu 2$

Ha : $\mu 1 > \mu 2$

Ho is a hypothesis stating the speaking learning outcomes of students who did not like to play video games ($\mu 1$) is the same as the speaking learning outcomes of students who liked to play video games ($\mu 2$). This means there was no difference in speaking learning outcomes of students who liked to play video games with those who did not like to play video games.

Ha is a hypothesis stating that the speaking learning outcomes of students who liked to play video games ($\mu 1$) was better than the speaking learning outcomes of students who did not like to play video games ($\mu 2$). This means there were significant differences in student learning outcomes between students who liked to play video games and students who did not like to play video games. In hypothesis testing, the criteria for rejecting or not rejecting Ho were based on the value of the t-table at a significant level of 5%. If t arithmetic > t-table, then Ho is rejected, and if t arithmetic < t-table Ho cannot be rejected.

Band Scores and Descriptors

To find out and support the data, the researchers included the criteria of student grades for English subjects. These criteria will help explain the standard of achievement achieved by each student. The following is a table of criteria for the students' grades in English Grammar School subject class VI:

Table 3.1 the criteria of student grades for English Subject in VI class Surabaya Grammar School.

Grade	Score	Description
A+	90-100	Has an excellent understanding of the subjects
A A-	86-89 81-85	Has very good understanding of the subject
B+ B B-	76-80 71-75 66-70	Has a good understanding of the subject
C+	61-65	Has adequate understanding of the subject
C	56-60	Has fair understanding of the subject
C-	51-55	Has basic understanding of the subject
D	<50	Has not met the requirements of the minimum grade

Adapted from Surabaya Grammar School Student Profile Book.

RESEARCH FINDINGS AND DISCUSSION

Research findings

The researcher did the research and got the complete data from all the research instruments including test and questionnaire. To gain the objectives of the research, the researcher had analyzed the data systematically and accurately. The data was analyzed in order to draw conclusion about the objective of the study. Researcher described the findings in this chapter into four parts; Variable Description, Learning Outcomes Data Description, Hypothesis Testing Research, and Discussion. They would be described as follows:

1. Variable Description

The X variable in this study were students who liked to play video games with students who did not like to play video games. To find out the difference in learning outcomes in students who liked to play video games and those who did not like to play video games, researchers conducted an initial survey by taking the data through a questionnaire.

In VI-1 class, there were 20 students, with eight students played video games, and 12 students did not play video games. In VI-2 class, there were 24 students, with seven students played video games, and 13 students did not play. In VI-3 class, there were 25 students, with 10 students played video games, and 15 students did not play. So the overall total observed were 69 students consisting of 25 students who played video games, and 44 students did not play video games.

Y variable is the value of students' learning outcomes who liked to play video games with students who did not like to play video games. The value used for the calculation of the average (mean) uses the value of learning outcomes in semester 1 (one), in December of the 2019/2020 school year. To find out the differences in student learning outcomes, researchers compared the average results (mean) in each class, then researchers compared the average (mean) based on speaking value to see more clearly about the difference in learning outcomes in each speaking value. After obtaining the average results, the researchers began to group students who liked play video games with those who did not like play video games.

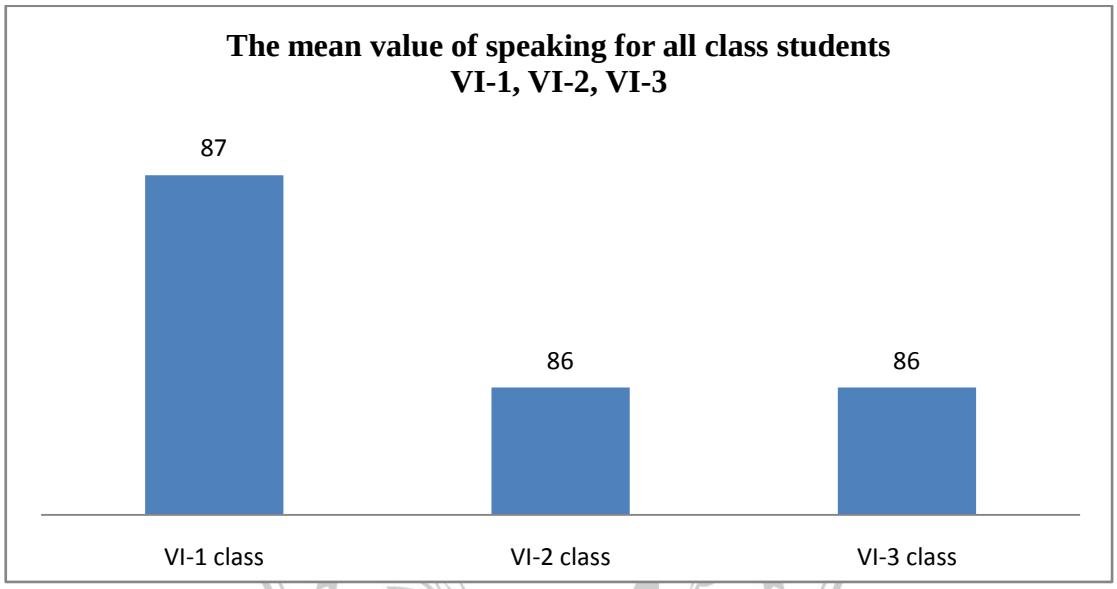
The grouping was done in the initial stages carried out in each class. After obtained the results of students' speaking tests based on the group of students who liked to play video games with those who did not like play video games. The researchers then grouped students who liked to play video games with those who did not like to play video games based on the frequent playing time of students. This

grouping was based on a pre-research questionnaire that explained the amount of playing time as much as every day, once every two days, once a week, once every two weeks.

2. Learning Outcomes Data Description

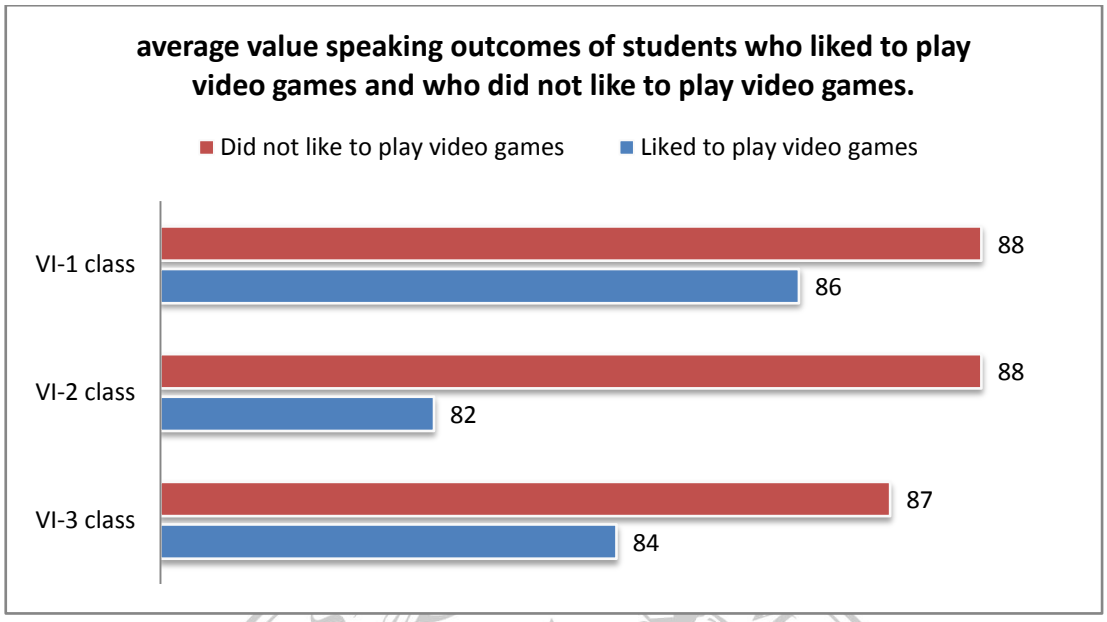
Based on the analysis results that have been obtained through several stages following the ability of researchers, the results of the analysis are as follows:

Diagram 4.1. Students who liked to play video games and who did not like to play video games in VI-1, VI-2, VI-3 class.



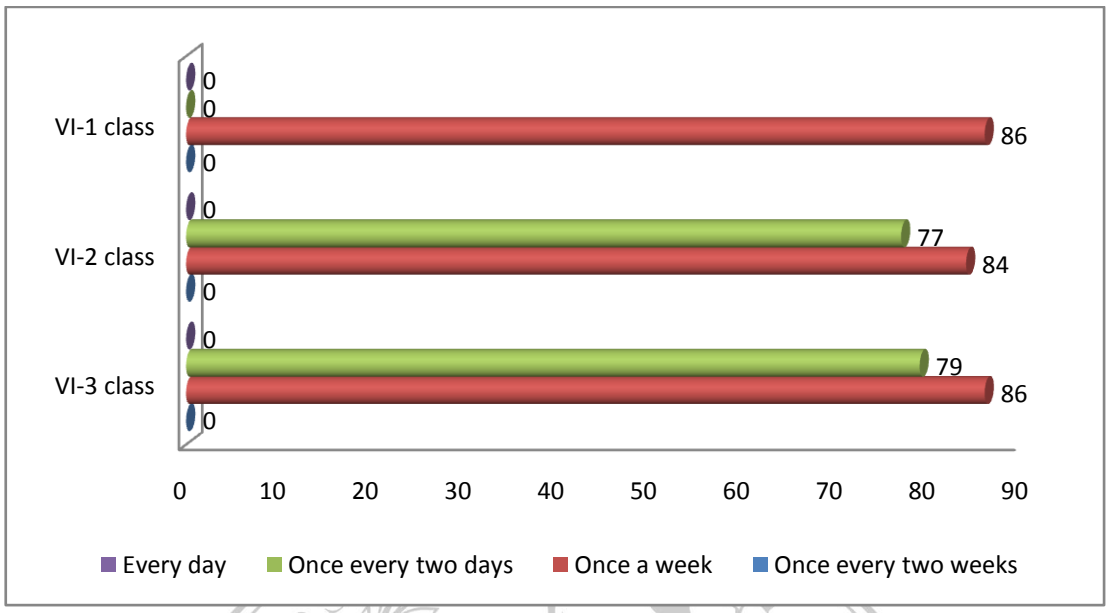
In the diagram above it is found that the average (mean) in VI-1 class equal to 87 (Appendix: 4 page: 54), VI-2 class amounted to 86 (Appendix: 8 page: 60), and VI-3 class is 86 (Appendix: 12 page: 66). From the three results of average (mean) in VI-1, VI-2, and VI-3 class, the highest average (mean) obtained in VI-1 class that amounted 87, then the same result in VI-2 and VI-3 class, which is 86.

Diagram 4.2. Average value speaking outcomes of students who liked to play video games and who did not like to play video games.



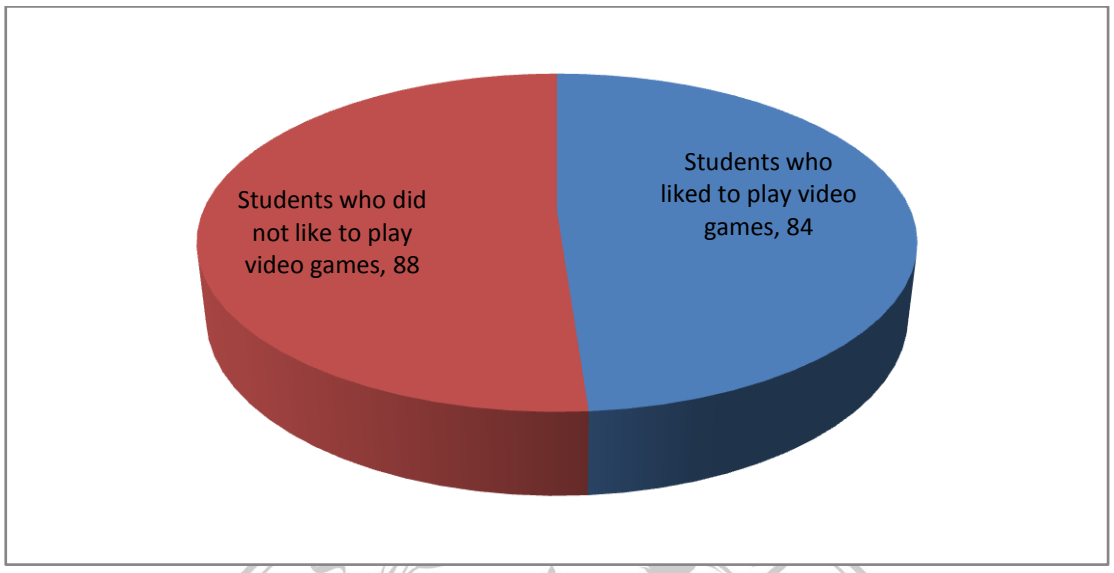
In the diagram above the results were obtained: for a higher average (mean) 86 (Appendix: 6 page: 58) for students who played video games found in VI-1 class, while the lowest is in VI-2 class with an average value (mean) 82 (Appendix: 10 page: 64). For students who did not play video games that had a higher average (mean) in VI-1 and VI-2 class with a mean value 88 (appendix: 6, 10 page: 58, 64), and the lowest average (mean) is in VI-3 class with the average (mean) 87 (Appendix: 14 page: 70).

Diagram 4.3. Average speaking score based on playing time in VI-1, VI-2, and VI-3 class.



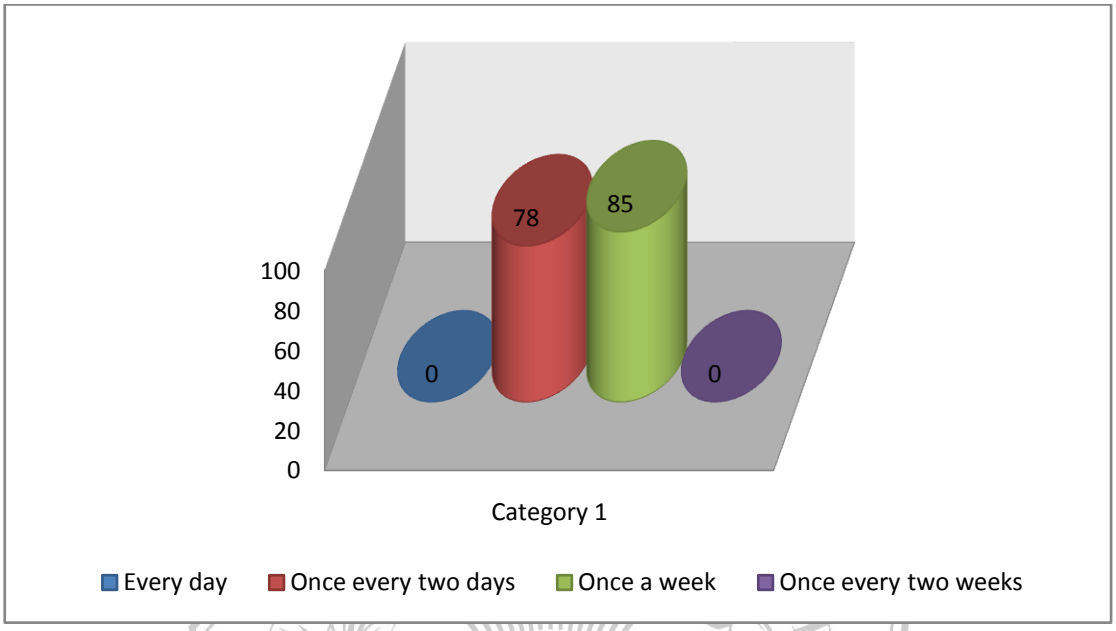
In the diagram above shows that, for all students consisting of three classes, namely: VI-1, VI-2, and VI-3 class, there were no data for students who played video games every day (Appendix: 7 page: 59). For students who played video games every two days, the highest average (mean) is in VI-3 class 79 (Appendix: 15 page: 71), and the lowest average (mean) is found in VI-2 class 77 (Appendix: 11 page: 65). For students who played video games once a week, the highest mean (mean) is in VI-1 class 86 and VI-2 class 86 (Appendix: 7, 15 page: 59, 71), while the lowest is in VI-2 class 84 (Appendix: 11 page: 65). There were no students who played video games once every two weeks

Diagram 4.4. The average value of student speaking score (mean) who liked to play video games and who did not like to play video games in VI class Surabaya Grammar School.



Based on the diagram above, the results obtained average value (mean) students who liked playing video games for 84, while students who did not like to play video games received an average (mean) of 88. From the results mentioned, it can be concluded that students who liked to play video games had learning problems, which result in lower student scores when compared to students who did not like play video games. By the objectives of this study, there were indeed differences in students learning outcomes when viewing from the average value between students who liked playing video games with students who did not like playing video games. (Appendix: 16 page: 72).

Diagram 4.5. The average value of students who liked to play video games with those who did not like to play video games based on playing time in VI-1, VI-2, and VI-3 class.



Based on the graph above, there were no students who played video games every day (Appendix: 17 page: 74), while students who played once every two days get an average value (mean) of 78 (Appendix: 17 page: 74), continued on students who played once a week got an average grade (mean) amounted to 85 (Appendix: 17 page: 74), and there were no students who played video games once every two weeks (Appendix: 17 page: 74). So the average value the high mean of students based on playing time is at students who played once a week, while the lowest were at students who played once every two days.

3. Hypothesis Testing Research

After classifying students, the researcher began to calculate the average (mean). To attain the value of learning outcomes, hypothesis testing of research was conducted using t-test. If t-count *t-count* < *t-table* means that there was no significant difference between students who liked playing video games with students who did not like playing video games and if t-count, *t-count* > *t-table* means there was a significant difference between students who liked playing video games with students who did not like playing video games. Hypothesis testing results on samples of students who liked playing

video games with those who did not like playing video games are presented as follows:

Table 4.1 t-test of students who liked to play video games with students who did not like to play video games.

Data	VI class	
	Students who liked to play video games	**Students who did not like to play video games**
Mean	84	88
Variant	14.36	13.51
N	25	44
Df	49	
t-value	-3.67	
t-table	2.00	
Conclusion	Ho accepted	

Based on the data in table 4.1 above, it was figured out that the average value of students who liked playing video games was 84 while the average value of students who did not like playing video games was 88.The results of the average value can then be calculated in accordance to their variants. The value of variants of students who liked playing video games was 14.36 while the grades variants of students who did not like playing video games were 13.51. After finding out the average value and the value of the variants, the hypotheses were calculated with a t-value of -3.67 smaller than the value of t-table at a significant level 5% of 2.00. For t-count is in the area of Ho acceptance and rejection Ha. This data has led to the results that there were no differences in students' learning outcomes for both students who liked playing video games and students who did not like playing video games. These results indicated that students who liked playing or did not like playing video

games had an average value that showed no difference when comparing to students who did not like playing video games. In short, the objectives are to see whether there are differences in students who like to play video games with those who did not like play video games at Surabaya Grammar School (Appendix: 2 page: 50).

Discussion

The significance differences is a Significant Difference between two groups or two points in time means that there is a measurable difference between the groups and that, statistically, the probability of obtaining that difference by chance is very small (usually less than 5%). Thus, it is safe to assume that the difference is due to the experimental manipulation or treatment.

Statistical difference should not be confused with the size of the difference between the groups. For example, one group may have a mean score of 95 while another has a mean score of 98, and this result may be statistically significant but not a very large or meaningful effect.

Based on the calculations, there was no significant difference in students' learning outcomes both students who liked playing video games and students who did not like playing video games. In contrast, through the average calculation, there were no differences in the average value (mean) of students who liked play video games by 84 smaller when compared with students who did not like play video games with a mean value (mean) as big as 88.

Although there was a slight difference in the value, it is convinced from the results provide evidence proofing that video games have an impact on the values of learning outcomes, as examined in VI class at Surabaya Grammar School. According to the findings obtained from the average value, it is confirmed that playing video games does not necessarily bring negative impact on students' learning outcomes and achievement.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the study and discussion, it can be concluded that there was no significant difference in learning outcomes between students who liked to play video games and students who did not like to play video games in grade VI of Surabaya Grammar School. This was indicated by the results of t-test calculations where the value of t-value = -3.67 smaller than the value of t-table = 2.00. However, if viewed from the average value of students who liked to play video games was lower with 84 compared to students who did not like to play video games with the average grade 88.

Suggestion

From the research results obtained, the researcher suggests:

1. For parents
   a. Give a limit to the time playing for students, especially in playing video games.
   b. Take the time to play for educational games for students who do not play video games too often.
   c. Determine student study time.
2. For students

   Considering the characteristics of students who still enjoy playing, it is expected that students to limit every playing activity, whether playing traditional games or video games. This limitation on playing time is intended so that students have a balanced time between playing.

REFERENCES

Al Hosni, Samira. (2014). *Speaking Difficulties Encountered by Young Learners.* Indiana University Bloomington.

Aliaga, M. and Gunderson, B. (2002). *Interactive Statistics*. Thousand Oaks: Sage.

Arikunto, Suharsimi. (2009). *Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.*

Ary et Al. (2010). *Introduction to research in education. 8th Ed.* Belmont: Wadsworth Cengage Learning.

Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. New York: Pearson/Longman.

Brown, H. D. (2001). *Teaching by Principle An Interactive Approach to Language Pedagogy.* San Francisco: Longman.

Bulmer, M. (2004). *Questionnaires, 1st edition, Sage Benchmarks in Social Science Research Methods*. London, 354 pp., 2004.

Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge: Cambridge University Press.

Cameron, L. (2003). *Challenges for ELT from the expansion in teaching children*. ELT Journal, 57/2, pp. 105-112.

Churchill, G. A. & Iacobucci, D. (2005). *Marketing research: Methodological foundations (9th. ed.)*. Mason: Thomson South-Western.

Cianfrone, B., Zhang, J. and Jae Ko, Y. (2011). *Dimensions of motivation associated with playing sport video games, Sport, Business and Management*. Vol. 1 No. 2, pp. 172-189.

Clark, C. (2000). *Innovative strategy: Concept cartoons. Instructional and learning strategies, 12: 34- 45.*

Creswell, J. W. (2012). *Education Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research4thEdition.* University of Nebraska–Lincoln.

Denzin N. and Lincoln Y. (Eds.) (2000). *Handbook of Qualitative Research*. London: Sage Publication Inc.

Esposito, Nicolas. (2005). *A Short and Simple Definition of What a Video Games Is.* France: University of Technology of Compiègne.

Harmer, Jeremy. (2007). *How to Teach English 2nd Edition Jeremy Harmer*. Cambridge UK.

Jack C. Richards. (2008). *Teaching listening and speaking; From theory to practice*. New York: Cambridge University Press.

Kryzwinska, Tanya., King, Geoff. (2002). *Computer Games / Cinema / Interfaces*. Department of Performing Arts Brunel University Uxbridge, UB8 3PH UK.

Musthafa, Bachrudin. (2010). *Teaching English to Young Learners in Indonesia: Essential Requirements.* Indonesia University of Education.

Nunan, D. (2006). *Task-based language teaching in the Asia context: Defining 'task'. Asian EFL Journal*, 8 (3),12-18.

Olson, C. K. (2010). *Children's motivations for video game play in the context of normal development.* Review of General Psychology, 14, 180 –187.

Palys, T., & Atchison, C. (2008). *Research Decisions: Quantitative and Qualitative perpective*. Toronto, Canada: Thomson Nelson.

Popov, A. (2013, August 22). *Dialy News.* Retrieved June 2, 2020, from nydialynews:https://www.nydialynews.com/life-style/health/playing-video-games-boost-strategic-thinking-article-1.1433812

Qureshi, I. A. (2013). Psycholinguistic, *The Importance of Speaking Skill for EFL Learners.* Pakistan: Alama Iqbal Open University, Department of English.

Race, P. (2007). *The Lecturer's Toolkit: A Practical Guide to Assessment, Learning and Teaching Routledge.* Taylor and Francis Group, London.

Segura Alonso, Rocío. (2012). *The importance of teaching listening and speaking skills.* Complvtensis University: Teaching of Language and Literature Faculty of Education.

Shank, G. (2002). *Qualitative Research. A Personal Skills Aproach*. New Jersey: Merril Prentice Hall.

Sugiyono. (2011). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D). Bandung: Alfabeta.*

Sugiyono. (2017). *Metode Penelitian Kuantitatif Kualitatif dan R & D. Bandung : Alfabeta.*

Yahya. M. (2013). *Pengaruh Game online Terhadap Prestasi Belajar*. Retrieved July 12, 2020, from (Jurnal): http://Yahya_Muhamad.com. Jurnal Ilmiah Teknologi Pendidikan 2013.

Zhang, S. (2009). *The role of input, interaction, and output in the development of oral fluency*. English Language Teaching,2(4),91–100.

Zimmerman, E. Narrative. (2004). *Interactivity, Play, and Games*. In Wardrip-Fruin, N. & Harrigan, P. (eds), First Person, MIT Press.